

ABSTRACT

The present invention relates to a novel endonuclease enzyme which is secreted from immune cell and recognizes bacterial DNA as foreign agent and processes it to produce about 10 bp single-stranded oligonucleotide including CpG motif which is involved in immune response. Also, the present invention relates to a process for producing the endonuclease which comprises culturing human B-lymphoblastic IM9 cell line or TPA-treated myelogenous U937 cell line on an appropriate medium to produce the said endonuclease and isolating the said endonuclease from the cell lysate or the culture medium. In addition, the present invention relates to an immune adjuvant comprising about 10 bp single-stranded oligonucleotide having CpG motif produced by treatment of bacterial DNA by the endonuclease.